

Application No. 10/589,630  
AMENDMENT dated June 10, 2010  
Reply to Office Action of March 12, 2010

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A cartridge containing one or more beverage ingredients and being formed from substantially air- and water-impermeable materials, said cartridge comprising an inlet for the introduction of an aqueous medium into the cartridge, and an outlet for a beverage produced from said one or more beverage ingredients, wherein said cartridge comprises means for producing a jet of the beverage, wherein said means for producing the jet of the beverage comprises an aperture in a beverage flow path linking the inlet to the outlet, characterised in that the cartridge comprises one or more microscopic projections at or in the vicinity of the aperture for contacting the beverage flow path, and the microscopic projections have a height or thickness of 0.01 to 0.50 mm.
2. (Withdrawn) A cartridge as claimed in claim 1 wherein the one or more microscopic projections comprise fibrils.
3. (Withdrawn) A cartridge as claimed in claim 1 wherein the one or more microscopic projections comprises surface irregularities.
4. (Original) A cartridge as claimed in claim 1 wherein the one or more microscopic projections comprises ribs.
5. (Previously Presented) A cartridge as claimed in claim 1, wherein the one or more microscopic projections depend from a rim of the aperture.

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6. (Previously Presented) A cartridge as claimed in claim 1, wherein the one or more microscopic projections depend from a surface of a conduit forming a portion of the beverage flow path.

7. (Original) A cartridge as claimed in claim 6 wherein the one or more microscopic projections are located at an entrance to the flow conduit.

8. (Original) A cartridge as claimed in claim 6 wherein the one or more microscopic projections are located at one or more positions in a region up to 30% along the length of the flow conduit measured from an upstream entrance.

9. (Original) A cartridge as claimed in claim 1, wherein the microscopic projections have a height of 0.01 to 0.50 mm.

10. (Original) A cartridge as claimed in claim 9 wherein the microscopic projections have a height of 0.09 to 0.11 mm.

11. (Original) A cartridge as claimed in claim 1, wherein the microscopic projections have a thickness of 0.01 to 0.50 mm.

12. (Original) A cartridge as claimed in claim 11 wherein the microscopic projections have a thickness of 0.06 to 0.10 mm.

13. (Original) A cartridge as claimed in claim 12 wherein the microscopic projections have a thickness of 0.08 mm.

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14. (Previously Presented) A cartridge as claimed in claim 1, wherein the microscopic projections have a length of up to 2.5 mm.

15. (Previously Presented) A cartridge as claimed in claim 1, wherein the aperture has a cross-sectional area of 0.4 to 0.7 mm<sup>2</sup>.

16. (Previously Presented) A cartridge as claimed in claim 1, wherein the aperture is in the form of an elongated slot.

17. (Previously Presented) A cartridge as claimed in claim 1, further comprising at least one inlet for air and means for generating a pressure reduction of the jet of beverage, whereby, in use, air from the at least one air inlet is incorporated into the beverage as a plurality of small bubbles.

18. (Original) A cartridge as claimed in claim 17 wherein the at least one air inlet is provided downstream of the aperture.

19. (Previously Presented) A cartridge as claimed in claim 18 wherein the insert comprises a discharge spout defining the outlet.

20. (Original) A cartridge as claimed in claim 19 wherein the jet of beverage issuing from the aperture is directed into the discharge spout.

21. (Original) A cartridge as claimed in claim 20 wherein the jet of beverage impinges a surface of the discharge spout between issuing from the aperture and exiting the outlet.

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22. (New) A cartridge containing one or more beverage ingredients and being formed from substantially air- and water-impermeable materials, said cartridge comprising an inlet for the introduction of an aqueous medium into the cartridge, and an outlet for a beverage produced from said one or more beverage ingredients, wherein said cartridge comprises means for producing a jet of the beverage, wherein said means for producing the jet of the beverage comprises an aperture in a beverage flow path linking the inlet to the outlet, characterised in that the cartridge comprises one or more microscopic projections at or in the vicinity of the aperture for contacting the beverage flow path, and wherein one or more microscopic projections comprises ribs.

23. (New) A cartridge as claimed in claim 22, wherein the one or more ribs depend from a surface of a conduit forming a portion of the beverage flow path.

24. (New) A cartridge as claimed in claim 23 wherein the one or more ribs are located at one or more positions in a region up to 30% along the length of the flow conduit measured from an upstream entrance.

25. (New) A cartridge as claimed in claim 22, wherein the one or more ribs have a height of 0.001 mm to 0.50 mm.

26. (New) A cartridge as claimed in claim 22, wherein the one or more ribs are transverse or at an angle to the flow path.

27. (New) A cartridge as claimed in claim 22, wherein the one or more ribs have a length of 0.2 to 2.50 mm.

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28. (New) A cartridge as claimed in claim 22, wherein the one or more ribs have a thickness of 0.01 mm to 0.50 mm.

29. (New) A cartridge as claimed in claim 22, wherein a shape of the one or more ribs is selected from the group consisting of straight and convoluted.

30. (New) A cartridge containing one or more beverage ingredients and being formed from substantially air- and water-impermeable materials, said cartridge comprising an inlet for the introduction of an aqueous medium into the cartridge, and an outlet for a beverage produced from said one or more beverage ingredients, wherein said cartridge comprises means for producing a jet of the beverage, wherein said means for producing the jet of the beverage comprises an aperture in a beverage flow path linking the inlet to the outlet, characterised in that the cartridge comprises one or more microscopic projections at or in the vicinity of the aperture for contacting the beverage flow path, wherein the one or more microscopic projections depend from a rim of the aperture.

31. (New) A cartridge containing one or more beverage ingredients and being formed from substantially air- and water-impermeable materials, said cartridge comprising an inlet for the introduction of an aqueous medium into the cartridge, and an outlet for a beverage produced from said one or more beverage ingredients, wherein said cartridge comprises means for producing a jet of the beverage, wherein said means for producing the jet of the beverage comprises an aperture in a beverage flow path linking the inlet to the outlet, characterised in that the cartridge comprises one or more microscopic projections at or in the vicinity of the aperture for contacting the beverage flow path, wherein the one or more microscopic projections depend from a surface of a conduit forming a portion of the beverage flow path.

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32. (New) A cartridge as claimed in claim 31, wherein the one or more microscopic projections are located at an entrance to the flow conduit.

33. (New) A cartridge as claimed in claim 31, wherein the one or more microscopic projections are located at one or more positions in a region up to 30% along the length of the flow conduit measured from an upstream entrance.

34. (New) A cartridge containing one or more beverage ingredients and being formed from substantially air- and water-impermeable materials, said cartridge comprising an inlet for the introduction of an aqueous medium into the cartridge, and an outlet for a beverage produced from said one or more beverage ingredients, wherein said cartridge comprises means for producing a jet of the beverage, wherein said means for producing the jet of the beverage comprises an aperture in a beverage flow path linking the inlet to the outlet, characterised in that the cartridge comprises one or more microscopic projections at or in the vicinity of the aperture for contacting the beverage flow path, wherein the microscopic projections have a length of up to 2.5 mm.

35. (New) A cartridge containing one or more beverage ingredients and being formed from substantially air- and water-impermeable materials, said cartridge comprising an inlet for the introduction of an aqueous medium into the cartridge, and an outlet for a beverage produced from said one or more beverage ingredients, wherein said cartridge comprises means for producing a jet of the beverage, wherein said means for producing the jet of the beverage comprises an aperture in a beverage flow path linking the inlet to the outlet, characterised in that the cartridge comprises one or more microscopic projections at or in the vicinity of the aperture for contacting the beverage flow path, wherein the aperture has a cross-sectional area of 0.4 to 0.7 mm<sup>2</sup>.